IDENTIFICATION OF SITES ILLUSTRATED IN THE EASTER ISLAND REPORT BY WILLIAM J. THOMSON

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The Rapa Nui Expedition of the USS *Mohican* in late December 1886 had enormous significance for further research on Easter Island history, archaeology, ethnology, and culture. The expedition team surveyed 113 *ahu*, studied the quarries of Rano Raraku and the Birdman village of 'Orongo, recorded traditions of the islanders with the help of Alexander Salmon, and compiled a large ethnographic collection including two *rongorongo* tablets.

Lieutenant William E. Safford (Langdon 1994:50) produced the photographic documentation of numerous island sites, especially detailed for Rano Raraku and 'Orongo; the latter photos were used during the restoration of the houses (Mulloy 1997:79). In addition to the photographic documentation performed by the *Mohican* expedition "private Anton Ayasse, … a clever draftsman, also accompanied the party … making sketches of objects of interest" (Cooke 1899:692). Some of Ayasse's images and Safford's photographs were redrawn by W.H. Chandlee for engraving (Langdon 1994: 51). The original pictures (e.g., Thomson's figs. 1, 2, 3, 10) can be viewed online with the help of Smithsonian Institution Research Information System (SIRIS; *www.siris.si.edu*) using "Easter Island" as a search term.

The analysis of archaeological documentation produced by the early visitors is very important, as it allows for the extraction of useful information concerning the evolution of the sites and their erosion caused by the action of the elements. Recently, Charles Love started a project aiming to create an extensive modern photographic record to parallel the images published by William Thomson and Katherine Routledge (Love 2006: 94), discovering in the process that the captions accompanying the figures and the plates in Thomson's report may not be always accurate. In particular, plate 33 entitled "Central rear view of right wing of platform of Tongariki, showing fallen images" in fact depicts the front view of Ahu Vaihu (*ibid.*).

Following the breakthrough made by Love, it is possible to show that only *two* out of five plates captioned as Ahu Tongariki (Thomson 1891: pls.30-34) actually document the latter site (i.e., 31 and 34, respectively). The sea wall of Ahu Heki'i appears in Thomson's plate 30, easily identifiable with more recent photographs (*e.g.*, Heyerdahl 1961: pl.18a). Thomson's plate 32 documents the seawall of Ahu Vaihu (Figure 1a); a modern image (Figure 1b) reveals that nowadays the wall is missing many of its upper tier slabs.

According to the caption for Thomson's plate 16, it shows the shores of Rapa Nui as seen from Hangaroa (Figure 2a). In fact, the picture was taken at Tongariki (Figure 2b), displaying the characteristic outlines of Poike's cliffs and Motu Marotiri in the background.

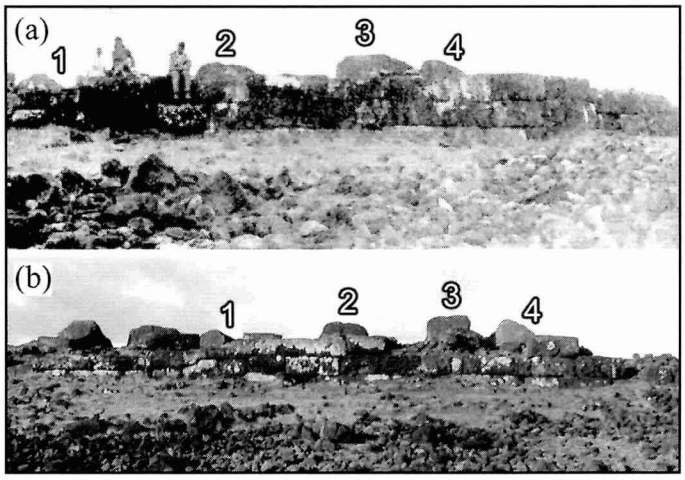

Figure 1. Sea wall of Ahu Vaihu: a) photo by W. Safford captioned "Left wing of platform of Tongariki" (from Thomson 1891: pl.32); b) modern view (photo by the author, 2002); numbers denote the individual *moai*.

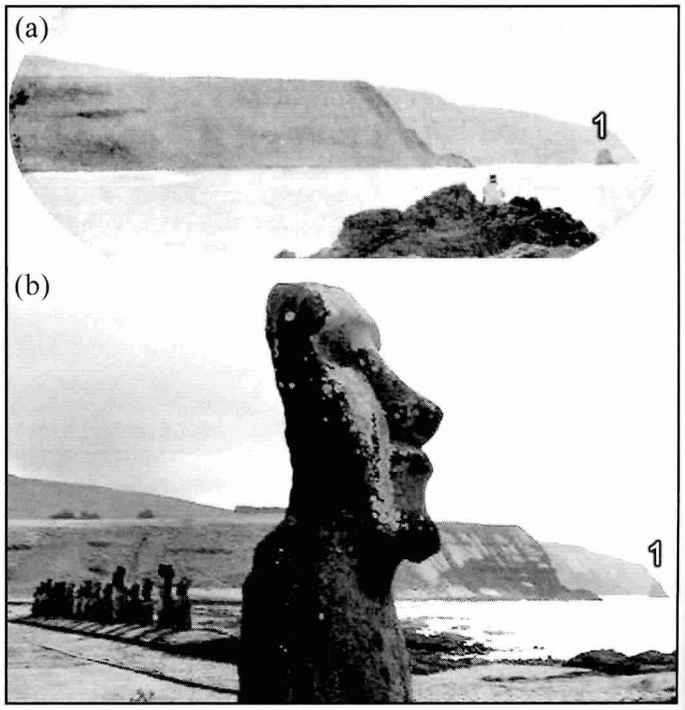

Figure 2. Poike cliffs from Tongariki: a) photo by W. Safford captioned "Appearance of Easter Island from the roadstead of Hanga-roa" (from Thomson 1891: pl.16); b) modern view (photo by author, 2002); 1) Motu Marotiri.

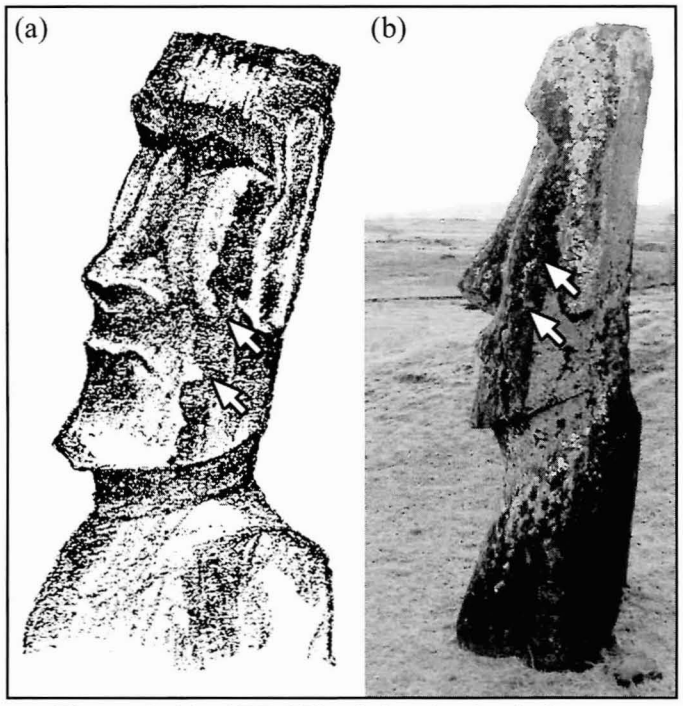

Figure 3. *Moai* RR-079: a) drawing by A. Ayasse captioned "The mutilated image Hiara, outside of crater of Rana Roraka [*sic*]" (from Thomson 1891: fig.16); b) modern view (photo by author, 2002).

The drawings featured in Thomson's report are not photo-realistic, but in the majority of cases they are considerably accurate to the original, allowing the *exact* identification of the sites in question. In particular, the north coast *tupa* documented by Ayasse (Thomson 1891: fig.9) was already successfully located (Love 2006:94).

One of Thomson's comments addresses a curious statue located at the external slopes of Rano Raraku (1891:495), featuring

> tool-marks around the neck as though an effort had been made to cut the head off. The natives call this "Hiara" and have a tradition to the effect that it belonged to a powerful clan who were finally defeated in war, and that their enemies had made an attempt to destroy the statue by cutting of the head. The story may be based only upon the mutilation, but the chances are that it is founded upon fact.

The picture by Ayasse (Figure 3a), despite being criticized as "a half-hearted attempt at expressing 'mutilation'" (Drake 1993:51) documents a *real moai* RR-079 (Figure 3b) with a "scar" on its left cheek and the left side of the body. The shape of the "scar" in the historical drawing fits the modern photo (see the details highlighted with arrows in Figure 3).

Thomson's survey of the ceremonial platforms (1891: 500-513) features several illustrations, including "Platform No. 12. Called Ohau. Central section 18 feet long. 9 feet wide, and 6 feet high (*ibid.*, 503). One image thrown down upon its face on the inboard side, 8 feet 4 inches long". The caption to the drawing made by Ayasse (Figure 4a) specifies that "center stone weights 6 tons; circular pedestal stone, 5½ feet in diameter".

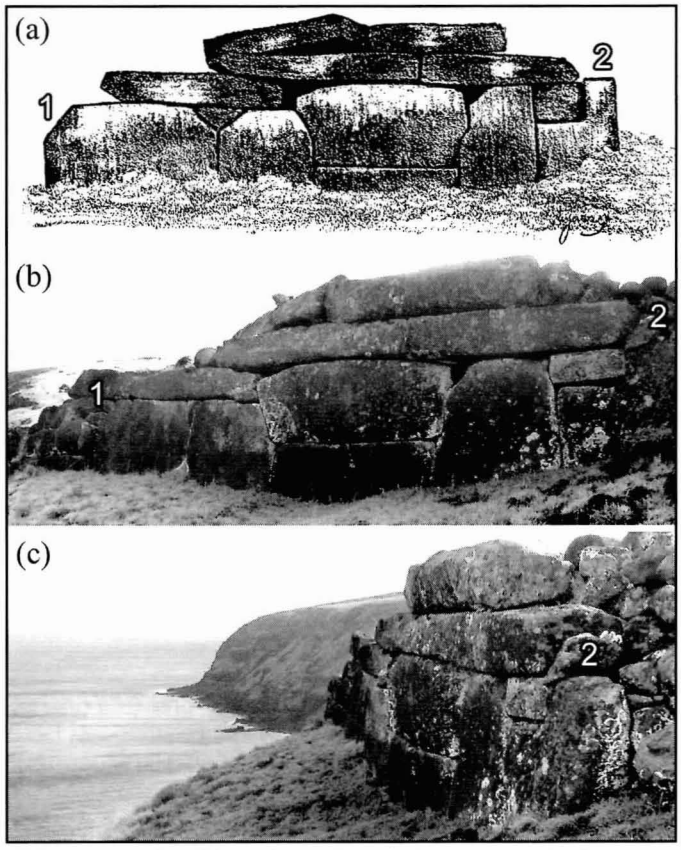

Figure 4. Ahu Ohau / Te Niu: a) drawing by A. Ayasse (from Thomson 1891: pl.29); b, c) modern view (photos by B. Zwang & M. Fehr, 2005).

The documentation of Ahu Ohau during the 20th century is quite curious. Alfred Métraux mentions it in the following context (1940:10):

> the line of burial platforms follows the shore and, though wave erosion is certainly rapid along the ashy volcano slopes, only two monuments have been attacked by the sea. Ahu-rikiriki, on the southern slopes of Rano-kao has fallen, and the same fate awaits ahu Ohau at the northwestern point. At the time of my visit (1934), one of its wings had been cut away from the main building by a deep fissure and could not be approached without danger.

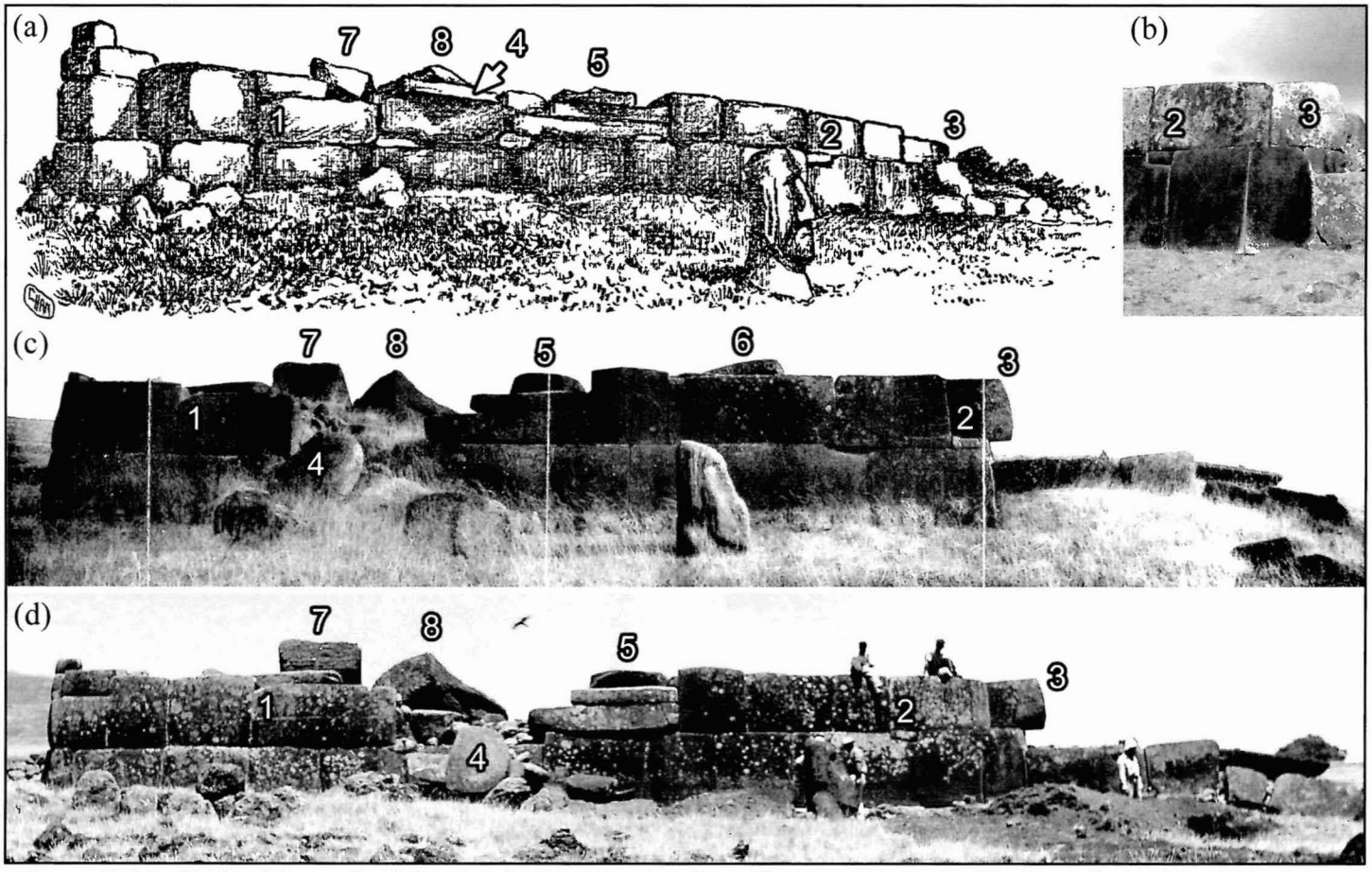

Figure 5. Ahu Tahira (Vinapu I): a) drawing by W. Chandlee (from Thomson 1891: fig.20); b) northern side of *ahu* (photo by author, 2002); c) picture taken by K. Routledge (1919: fig.35); d) photo by E. Schjerven taken during excavations by W. Mulloy (photo courtesy of Kon-Tiki Museum); numbers denote 1-3) slabs; 4-6) pedestals; 7-8) *moai*.

Several decades later, Thor Heyerdahl wrote "Ahu Ohau on cliff latter fallen into the sea" (1961:85). Jean Bianco added (1987:64): "Ahu No. 37, Ohau, Te Nui or Te Niu, according to the [different] authors: one section with four statues and the other with two or three; all disappeared into the ocean after 1934". This description is important, establishing a "bridge" between the toponyms Ahu Ohau = Ahu Te Niu. The latter was recorded by Englert (1948: 518): "#37. Ahu Te Niu, ahu-moai of incomplete type and very destroyed. It was some 85m long (with lateral wings), other dimensions can not be calculated anymore".

The site was briefly mentioned by Daniel Pardon as a platform at Punta Atu o Puna with outstanding "Incan-style" masonry (2003:168). The recent photos by Birgit Zwang and Michael Fehr (2005, also Figure 4b, c) allow a direct comparison with Thomson's plate 29. As one can see, Ayasse illustrated only the central part of the platform, bounded by the slabs 1 and 2. The slabs are depicted accurately, and the general preservation of the seawall after more than a century since its documentation by the *Mohican* Expedition is also remarkable. In complete accordance with the description given by Métraux, the northern wing of the *ahu* collapsed to the sea, so that the central part of the platform is located just at the edge of the cliff (Figure 4c).

Recently, Ahu Te Niu attracted significant scientific attention. The intensive excavations performed there in 2008 under the direction of Nicolas Cauwe (Musées Royaux d'Art et d'Histoire) and Claudio Cristino (Universidad de Chile) revealed many important and very interesting results about the history of the site (Cauwe *et al.*, 2008).

The drawing of the famous Ahu Tahira / Vinapu I, mis-captioned in Thomson's report with a survey number 110 (*i.e.*, that for Ahu Vinapu II; see Mulloy 1961:96), was made prior to the excavations by the *Mohican* team (Thomson 1891: 511-512). The image by Chandlee (and especially the original by Ayasse, SIRIS: NAA INV 08650400) accurately traces the individual stones (Figure 5a) and shows a triangular shadow below the pedestal 4 lying on top of the upper tier of slabs. The latter detail suggests that the pedestal was projecting over the wall, which could have been possibly facilitated the dislodging of the underlying slab (Horley, in prep.). Curiously, the rightmost (north) side of the platform displays the upper slab overhanging the wall (Figure 5a3). Nowadays, this slab blends perfectly with the lower tier masonry (Figure 5b). Surprisingly, the same unusual slab also appears in a picture taken by Katherine Routledge (Figure 5c3), as well as the

photo by Erling Schjerven (Fig. 5d3). The explanation of these unusual images can be found in Mulloy's report describing the excavations at Vinapu (1961:98):

> for purposes of stabilization ... a number of stones, which had fallen or been moved out of position, were replaced. These included ... the upper course stone of the north end of the central section, which had been pulled partly out and rotated 90 degrees on its base.

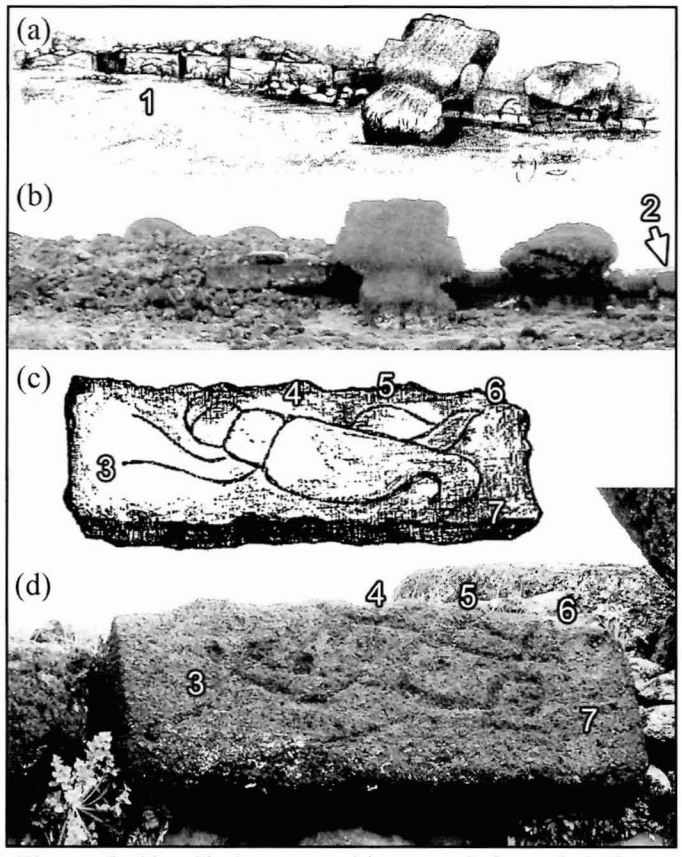

Figure 6. Ahu Akahanga: a, b) general view of platform and c, d) petroglyph decorating a panel of red scoria coping; a, c) drawings by A. Ayasse (from Thomson 1891: pl.35 and fig.19); b, d) photos by author, 2002.

Direct comparison of Figures 5c and 5d reveals that Routledge's panoramic image was improperly stitched, omitting a stone panel to the left of slab 1, so that the *ahu* looks too short from the southern side. Moreover, the photo was retouched — the upper part of the inlaid stone 2 was cut out from its actual position, leaving only a small cavity in the lower masonry tier. Strangely, the shape similar to the same inlaid stone appears attached to the base of slab 3 (Figure 5c). Despite these minor inconsistencies, Routledge's photograph presents unique early documentation of the lichens growing at Ahu Tahira, which, together with Schjerven's picture and modern photos, form an important dataset for lichenometry studies (Rutherford, *et al.* 2008:43).

Two of Ayasse's drawings are related to Ahu Akahanga, showing a front view of the site (Figure 6a) and a petroglyph decorating one of its panels (Figure 6c). According to Alan Drake (1993:51, fig.7), the latter was located on the leftmost of red scoria coping slabs (Figure 6a1). Comparing the drawing by Ayasse with a modern photo (Figure 6b), one will find that more coping slabs existed at the time of Thomson's visit, so that the design identified by Drake is missing nowadays. However, analysis of the petroglyphs adorning the surviving coping slabs reveals that the motif depicted by Ayasse still exists on the slab known as Akahanga panel D (Van Tilburg and Lee 1987:143, fig.3), partially seen in Figure 6b,2.

A close-up image (Figure 6d) allows one to discern the wavy curves at the left side of the panel, faint "body division" lines, a curve connected to the pointed upper "fin", and a curved lower "fin" (Figure 6c,d, 3-7) of a mythical (possibly marine?) creature.

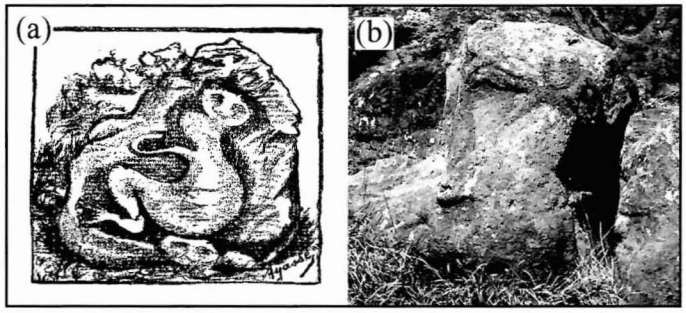

Figure 7. Mata Ngarau locus #27: a) drawn by A. Ayasse (from Thomson 1891:482, fig. 8); b) picture of the original carving showing a distinct beak (photo by G. Lee, 1989). Note: Locus numbers derive from Lee (1992).

The famous Birdman motif superimposed with a Make-make mask (Figure 7a), which does not properly show the beak of the *tangata manu* (Figure 7b), is probably one of the most discussed figures from Thomson's report (Lee 1992:144-145; Bahn 1993:76; Koll 1993:32-33).

Thomson's fig.7, depicting "sculptured rocks near Orongo" (Figure 8a) is even more curious. It *seems* to show a rock emerging from the ground, which, in contrast to the previous drawing, is sharply delimited with a straight horizontal line. Another surprising feature of the rock is a considerable cleft in its bottom part, creating the impression that the boulder is pierced through with a large hole. The only clearly seen carving represents a Birdman with a head pointing towards the lower left corner of the image and a strange foot with a thin sole and the toes carved at an angle to the latter. None of numerous *tangata manu* motifs documented at Mata Ngarau and 'Orongo (Lee 1992:129-151, also figs. 3.2, 4.1, 4.10, 4.31, 4.38, 4.40-4.45, 4.48) feature such an extravagant foot outline. However, the carvings of locus #45 include a strikingly similar shape between a foot of one Birdman and a neck of an adjacent *tangata manu* (Figure 8c1; see also Lee 1992:29, fig.3.2).

After this identification, it is easy to show that, to recover the proper orientation of the Birdman from Figure 8a, one

should rotate Ayasse's drawing upside-down and mirror-flip the resulting picture relative to the vertical axis. An intensity inversion is also useful to simplify the interpretation. As one can see from Figure 8b, obtained after the aforementioned manipulations, the "mysterious" boulder actually represents the view of the Mata Ngarau court area. The horizontal line does not depict the ground, but the ocean. The large cleft seen at the bottom of the rock (Figure 8a) is nothing other than a void between loci #43 and #40 (or #12), Figure 8b2,3. Moreover, the proper orientation of the drawing reveals *another* Birdman carved on the background boulder, with a distinct foot located close to the number "2" in Figure 8b. The image scanned after the original charcoal drawing by Ayasse (SIRIS: NAA INV 08651200) shows more clearly that this foot has toes. The rounded shape in the foreground can be tentatively associated with locus #36 of the court area of Mata Ngarau (Figure 8b and 8c,4).

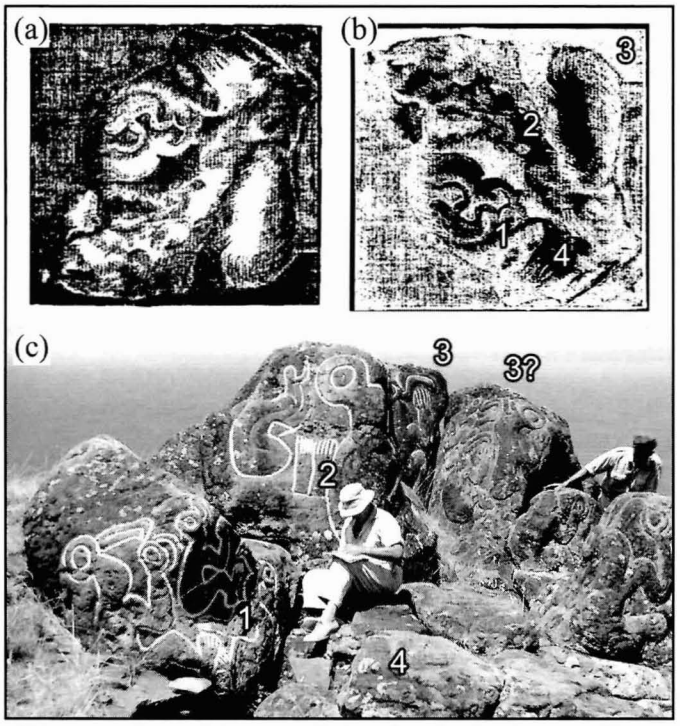

Figure 8. Mata Ngarau: a) drawing by A. Ayasse (from Thomson 1891:481, fig.7); b) same image after rotation, mirroring and intensity inversion; c) photo of Mata Ngarau by E. Schjerven (courtesy of Kon-Tiki Museum); numbers denote the following loci: 1) #45, 2) #43, 3) #40 (or neighboring #12) and 4) #36. Note: Locus numbers derive from Lee (1992).

Curiously, the transformations required to align the drawing (Figure 8a) with a photo (Figure 8c) suggest a plausible story behind the Thomson's fig.7. With a considerable certainty, it was drawn after a *negative* photographic plate. In old cameras using glass plates, as well as in modern film-based cameras, the layer of photosensitive emulsion faces the lens. On the printed photo, the image-bearing emulsion faces the beholder. Thus, looking on the plate from the emulsion side as if it was a printed photo, one will see a *mirrored* image. The rotation by 180 degrees comes from misidentification of a darker part (actually depicting the sky) as the ground, with the result that the figure was printed upside-down.

Therefore, analysis of the illustrations from Thomson's Easter Island report leads to two principal conclusions. First, in full accordance with a revealing observation by Love, the plates are not always provided with appropriate captions. This phenomenon may have a completely natural explanation: The *Mohican* team did a huge amount of surveying work in a very short time, so that they had to move quickly from one site to another. The drawings of the platforms made in the field could have been immediately labeled and attached to the survey data, but the photographic plates most probably were developed afterwards. Thus, the captions to the photographs were possibly assigned basing on the memory and the field notes of the surveyors; in this case, the unmistakable sites such as Rano Raraku and 'Orongo were attributed properly, but the numerous *ahu* and coastal pictures eventually caused some confusion. At the same time, the field drawings by Ayasse proved to be reasonably accurate, allowing exact identification of several petroglyphs, *moai*, and ceremonial platforms.

Acknowledgements

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Editor's note: The photograph featured in Figure 8(c) derives from a time when it was not too unusual for researchers to chalk through petroglyph lines in order to make them stand out — but this practice is vehemently discouraged today, as it has been shown to cause damage to the rock art.

Please refrain from this practice and other contact techniques to record petroglyphs or make them more visible (e.g., rubbings, pouring water on them). If you wish to capture the petroglyphs, take photographs and exploit shadows due to the position of the sun early in the morning or late in the day.